

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently amended) A process for preparing methionine, homoserine and/or lysine in a transgenic organism, wherein the process comprises:
 - a) introducing a nucleic acid comprising a nucleotide sequence encoding a threonine-degrading protein or a nucleic acid which increases threonine degradation in a transgenic organism, wherein the nucleic acid comprises
the nucleotide sequence of SEQ ID NO: 1;
a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2, or
a nucleotide sequence encoding a polypeptide having at least 85% sequence
identity to the amino acid sequence of SEQ ID NO: 2;
 - b) expressing the nucleotide sequence in the transgenic organism, and
 - c) harvesting the transgenic organism or obtaining one or more of the amino acid methionine, homoserine, or lysine, and
 - d) isolating the amino acid from the transgenic organism, the culture medium, or the
transgenic organism and the culture medium.
- 2-3. (Cancelled)
4. (Currently amended) The process of claim 1, wherein ~~the nucleotide sequence encoding a threonine-degrading protein comprises the consensus sequence of~~
~~—————H[X]₂G[X]R[X]₁₉D[X]₇K[X]₂₇G (SEQ ID NO: 27), or~~
~~—————HXDGAR[X]₃A[X]₁₅D[X]₄CXSK[X]₄PXGS[X]₃G[X]₇A[X]₄K[X]₂GGGXRQXG~~
~~(SEQ ID NO: 28);~~
~~—————~~and the process further comprises introducing a nucleic acid comprising a nucleotide sequence encoding a lysine-degrading protein which comprises the consensus sequence of
G[X]₄GIM[X]₄₅M[X]₂RK[X]₂M[X]₁₁GGXG[X]₃E[X]₂E[X]₃W (SEQ ID NO: 29), or
LG[X]₉LVYGG[X]₃GIMGXVA[X]₉G[X]₃GXIP[X]₂₄MHXRK[X]₂M[X]₆F[X]₃PGG

XGTXEE[X]₂E[X]₂TW[X]₂IG[X]₃KP[X]₄N[X]₃FY[X]₁₄F (SEQ ID NO: 30), or
a nucleic acid encoding a protein which increases threonine degradation and lysine
degradation in the transgenic organism.

- 5-6. (Cancelled)
7. (Previously presented) The process of claim 1, wherein the transgenic organism is cultivated and harvested after introduction and expression of the nucleic acid.
8. (Cancelled)
9. (Previously presented) The process of claim 1, wherein the essential amino acid methionine is involved.
10. (Previously presented) The process of claim 1, wherein the transgenic organism is a microorganism or a plant.
11. (Previously presented) The process of claim 10, wherein the transgenic organism is a microorganism selected from the group of genera *Corynebacterium*, *Brevibacterium*, *Escherichia*, *Bacillus*, *Rhodotorula*, *Hansenula*, *Schizosaccharomyces*, *Saccharomyces*, *Candida*, *Claviceps* and *Flavobacterium*.
12. (Previously presented) The process of claim 10, wherein the transgenic organism is a crop plant.
13. (Previously presented) The process of claim 12, wherein the transgenic organism is a plant selected from the group consisting of peanut, oilseed rape, canola, sunflower, safflower, olive, sesame, hazelnut, almond, avocado, bay, pumpkin, lettuce, flax, soybean, pistachio, borage, corn, wheat, rye, oats, millet, triticale, rice, barley, cassava,

potato, sugar beet, feed beet, aubergine, tomato, pea, alfalfa and perennial grasses and feed crops.

14. (Previously presented) The process of claim 1, wherein the nucleotide sequence is from a eukaryote.
15. (Previously presented) The process of claim 1, wherein the nucleotide sequence is from the genus *Saccharomyces*.
16. (Previously presented) The process of claim 1, wherein the nucleic acid is incorporated into a nucleic acid construct or a vector for introduction and expression in said transgenic organism.
17. (Previously presented) The process of claim 1, wherein additional biosynthesis genes of the amino acid prepared in the process are introduced into the organism.
- 18-25. (Cancelled)
26. (Currently amended) The process of claim 1, wherein the nucleic acid comprises a nucleotide sequence encoding a polypeptide having at least 95% sequence identity to the amino acid sequence of SEQ ID NO: 2 ~~with a negligible reduction in the threonine-degrading activity of SEQ ID NO: 2.~~
27. (Withdrawn) A process for producing an animal or human food, cosmetics or pharmaceuticals, comprising obtaining the amino acids produced according to the process of claim 1, and formulating the amino acids into an animal or human food, cosmetics or pharmaceuticals.